OPERATING SYSTEM - CS23431

EXP 10(B)

FIRST FIT

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PROGRAM:

```
#include<stdio.h>
int main(){
  int n1;
  printf("Enter memory block size: ");
  scanf("%d",&n1);
  int mem[n1];
  printf("Enter value of memory blocks: ");
  for(int i=0;i<n1;i++){
  scanf("%d",&mem[i]);
  }
  int n2;
  printf("Enter process block size: ");
  scanf("%d",&n2);
  int p[n2];
  printf("Enter values of process blocks: ");
  for(int i=0;i<n2;i++){
   scanf("%d",&p[i]);
  }
  int    frag[n1],alloc[n2],emp[n1],allocsize[n2];
  for(int i=0;i<n1;i++){
    emp[i]=1;
  }
  for(int i=0;i<n2;i++){
    alloc[i]=-1;
  }
  for(int i=0;i<n2;i++){
     for(int j=0;j<n1;j++){
        if(emp[j] && mem[j]>=p[i]){
           alloc[i]=j;
           allocsize[i]=mem[j];
           frag[i]=mem[j]-p[i];
           emp[j]=0;
```

```
        break;
      }
    }
  }
  printf("FileNo\tFilesize\tBlockNo\tBlocksize\tFragment\t\n");
  for(int i=0;i<n2;i++)
  {
     printf("%d\t%d\t%d\t%d\t%d\n",i,p[i],alloc[i],allocsize[i],frag[i]);
  }
}
```

OUTPUT:

```
Enter memory block size: 4
Enter value of memory blocks: 5
8
1
10
Enter process block size: 3
Enter values of process blocks: 1
4
7
FileNo  Filesize        BlockNo Blocksize       Fragment
0       1       0       5       4
1       4       1       8       4
2       7       3       10      3
```